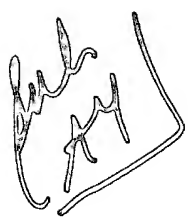


ABSTRACT OF THE DISCLOSURE



5 An electromagnetic wave detector or an area image
sensor comprises a number of pixel units arranged into
a matrix form and each pixel unit includes a conversion
element for converting incident electromagnetic waves
or high energy radiations into an electric charge, a
storage capacitor for storing the electric charge
produced by the conversion element, a thin film read
transistor connected to the storage capacitor, and a
10 thin film reset transistor also connected to the
storage capacitor. The pixel units are operated in a
storage-read-reset cycle on a row by row basis so that
any electric charge left after the read period is
expelled in the reset period. To the gates of the read
15 and reset thin film transistors in each pixel are
applied ON and OFF voltages at predetermined timings
and these voltages are set to values such that any
excessive electric charge produced in the storage
period is discharged by way of the thin film reset
20 transistor, not by way of the thin film read
transistor, in the same storage period.